

chain nodes :

8

ring nodes :

1 2 3 4 5 6 7

chain bonds :

1-8 4-7

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6

exact/norm bonds :

4-7

exact bonds :

1-8

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6

isolated ring systems :

containing 1 :

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom

Generic attributes :

8:

Saturation

: Unsaturated

*substructure search wherein N is
in ring node*

Trying 3106016892...Open

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PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

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 NEWS 3 Feb 06 Engineering Information Encompass files have new names
 NEWS 4 Feb 16 TOXLINE no longer being updated
 NEWS 5 Apr 23 Search Derwent WPINDEX by chemical structure
 NEWS 6 Apr 23 PRE-1967 REFERENCES NOW SEARCHABLE IN CAPLUS AND CA
 NEWS 7 May 07 DGENE Reload
 NEWS 8 Jun 20 Published patent applications (A1) are now in USPATFULL
 NEWS 9 JUL 13 New SDI alert frequency now available in Derwent's
 DWPI and DPCI

NEWS EXPRESS July 11 CURRENT WINDOWS VERSION IS V6.0b,
 CURRENT MACINTOSH VERSION IS V5.0C (ENG) AND V5.0JB (JP),
 AND CURRENT DISCOVER FILE IS DATED 06 APRIL 2001

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TOTAL

ENTRY

SESSION

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0.15

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Hong Liu

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DICTIONARY FILE UPDATES: 8 AUG 2001 HIGHEST RN 350791-61-6

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=>
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L1 STRUCTURE UPLOADED

=> que L1

L2 QUE L1

=> s l1
SAMPLE SEARCH INITIATED 15:11:03 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 1168 TO ITERATE

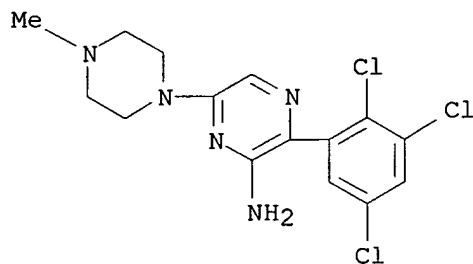
85.6% PROCESSED 1000 ITERATIONS 1 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 21311 TO 25409
PROJECTED ANSWERS: 1 TO 87

L3 1 SEA SSS SAM L1

=> d scan

L3 1 ANSWERS REGISTRY COPYRIGHT 2001 ACS
IN Pyrazinamine, 6-(4-methyl-1-piperazinyl)-3-(2,3,5-trichlorophenyl)- (9CI)
MF C15 H16 Cl3 N5



ALL ANSWERS HAVE BEEN SCANNED

=> s l1 ful

FULL SEARCH INITIATED 15:12:49 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 23967 TO ITERATE

100.0% PROCESSED 23967 ITERATIONS

14 ANSWERS

SEARCH TIME: 00.00.03

L4 14 SEA SSS FUL L1

=> fil caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

134.49

134.64

FILE 'CAPLUS' ENTERED AT 15:12:56 ON 09 AUG 2001

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FILE COVERS 1947 - 9 Aug 2001 VOL 135 ISS 7

FILE LAST UPDATED: 8 Aug 2001 (20010808/ED)

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=> s 14

L5 9 L4

=> d ibib abs hitstr 1-

YOU HAVE REQUESTED DATA FROM 9 ANSWERS - CONTINUE? Y/(N):y

L5 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1998:608606 CAPLUS

DOCUMENT NUMBER: 129:230741

TITLE: Preparation of pyrazines as anticonvulsants

INVENTOR(S): Cox, Brian; Nobbs, Malcolm Stuart; Shah, Gita
Punjabhai; Edney, Dean David; Loft, Michael Simon

PATENT ASSIGNEE(S): Glaxo Group Ltd., UK

SOURCE: PCT Int. Appl., 45 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

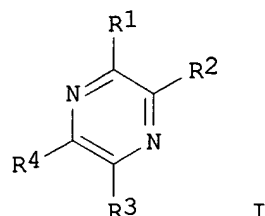
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9838174	A1	19980903	WO 1998-EP1077	19980226
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9868237	A1	19980918	AU 1998-68237	19980226
AU 732915	B2	20010503		
EP 966448	A1	19991229	EP 1998-913592	19980226
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 9807814	A	20000222	BR 1998-7814	19980226
JP 2000511203	T2	20000829	JP 1998-537310	19980226
US 6255307	B1	20010703	US 1999-380062	19990825
NO 9904213	A	19991029	NO 1999-4213	19990831
PRIORITY APPLN. INFO.:			GB 1997-4275	A 19970301
			GB 1997-8183	A 19970423

WO 1998-EP1077 W 19980226

OTHER SOURCE(S): MARPAT 129:230741

GI



AB The title compds. [I; R1 (un)substituted by one or more halo atoms Ph, naphthyl; R2 = NH₂, NHC(O)Ra; R3 = NRbRc, NHC(O)Ra, H; R4 = H, (un)substituted by one or more halo atoms C1-4 alkyl, CN, etc.; Ra = C1-4 alkyl, C3-7 cycloalkyl; Rb, Rc = H, C1-4 alkyl; NRbRc = (un)substituted 6-membered nitrogen contg. heterocycle; with the proviso that R1 does not represent 4-ClC₆H₄ when R2 = NH₂, and R3, R4 = H], useful in the treatment

of epilepsy, bipolar disorder or manic depression, pain, functional bowel disorders, neurodegenerative diseases, neuroprotection, neurodegeneration,

or prevention or reducing dependence on, or preventing or reducing tolerance or reverse tolerance to, a dependence-inducing agent, were prepd. and formulated. Thus, treatment of 2-amino-6-chloro-3-(2,3,5-trichlorophenyl)pyrazine (prepn. described) with aq. ammonia in EtOH afforded 56% I [R1 = 2,3,5-Cl₃C₆H₂; R2 = R3 = NH₂; R4 = H]. Compds. I exhibited ED₅₀'s of 1-20 mg/kg when tested for antiepileptic activity.

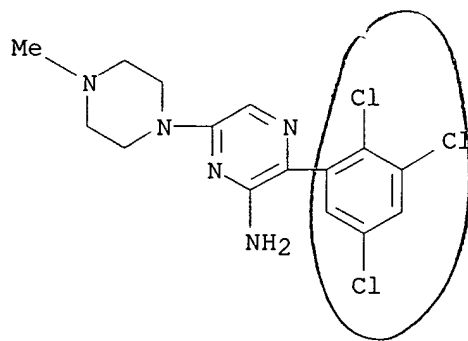
IT **212778-94-4P**

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

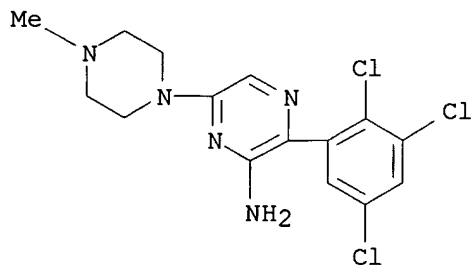
(prepn. of pyrazines as anticonvulsants)

RN 212778-94-4 CAPLUS

CN Pyrazinamine, 6-(4-methyl-1-piperazinyl)-3-(2,3,5-trichlorophenyl)- (9CI)
(CA INDEX NAME)



Hong Liu



L5 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1996:551083 CAPLUS

DOCUMENT NUMBER: 125:181512

TITLE: Optically active compound, liquid crystal composition containing the same and liquid crystal device

INVENTOR(S): Takiguchi, Takao; Iwaki, Takashi; Tokano, Goji; Kosaka, Yoko; Nakamura, Shinichi

PATENT ASSIGNEE(S): Canon Kk, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 39 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

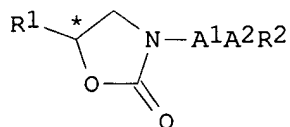
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08151577	A2	19960611	JP 1994-319499	19941130

OTHER SOURCE(S): MARPAT 125:181512
GI



I

AB The title compd. is represented by I (R1, R2 = C2-20 alkyl; A1 = pyrimidine-2,5-diyl, pyridine-2,5-diyl, etc.; A2 = A1, single bond, 1,4-phenylene, 1,4-cyclohexylene, 1,3-dioxane-2,5-diyl, 1,3-dithiane-2,5-diyl). The compn. contains 1-80 % of the compd. The compn. shows a chiral smectic phase. The device showed improved

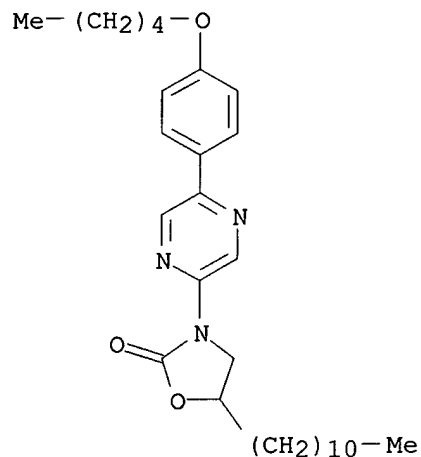
switching characteristics suitable for liq. crystal displays and liq. crystal shutters.

IT 180845-17-4

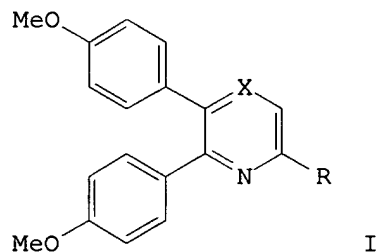
RL: DEV (Device component use); USES (Uses)

(optically active compd. for liq. crystal compn. of liq. crystal

display)
RN 180845-17-4 CAPLUS
CN 2-Oxazolidinone, 3-[5-[4-(pentyloxy)phenyl]pyrazinyl]-5-undecyl- (9CI)
(CA INDEX NAME)



L5 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1993:234009 CAPLUS
DOCUMENT NUMBER: 118:234009
TITLE: Studies on as-triazine derivatives. XIX. Synthesis of
2,3-diarylpyrazine and 2,3-diarylpyridine derivatives
as blood platelet aggregation inhibitors
AUTHOR(S): Konno, Shoetsu; Matsuya, Yuji; Kumazawa, Minako;
Amano, Masaki; Kokubo, Takeshi; Sagi, Mataichi;
Yamanaka, Hiroshi
CORPORATE SOURCE: Pharm. Inst., Tohoku Univ., Sendai, 980, Japan
SOURCE: Yakugaku Zasshi (1993), 113(1), 40-52
CODEN: YKKZAJ; ISSN: 0031-6903
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
GI



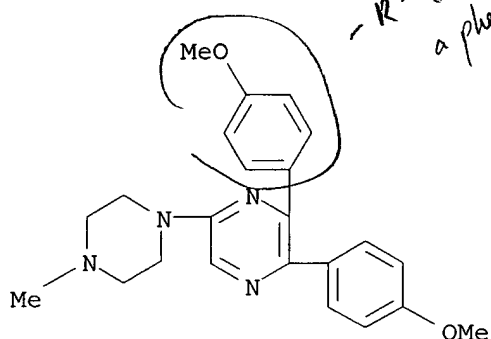
AB 4,5-Diphenyl-2-ethoxypyrimidine, 3,4-diphenyl-6-ethoxypyridazine, and 2,3-diphenyl-5-ethoxypyrazine were evaluated for inhibitory activity towards arachidonic acid-induced aggregation of rabbit blood platelet in vitro. 2,3-Diphenyl-5-ethoxypyrazine exhibited significant inhibitory activity. Various 5-substituted 2,3-bis(4-methoxyphenyl)pyrazines I (X = N R = OMe, OEt OPr, OBu, OC5H11-n, OCHMe2, OCH2CHMe2, OCH2R1, SEt, SMe, NHet, piperidino, N-methylpiperazino, R1 = cyclopropyl) were synthesized by the nucleophilic substitution reaction of 5-chloro-2,3-bis(4-methoxyphenyl)pyrazine. In a similar manner, substituted 2,3-bis(4-methoxyphenyl)pyridines I (X = CH, R as above) were prepd. from 2,3-bis(4-methoxyphenyl)-6-methylsulfonylpyridine, which was synthesized by the cycloaddn.-retro Diels-Alder reaction of 5,6-bis(4-methoxyphenyl)-3-methylsulfonyl-1,2,4-triazine with norbornadiene. Among the compds. prepd., I (X = N, R = OCHMe2) showed the most potent inhibitory activity, which was more than the activity of anitrazafen.

IT 141425-23-2P 147593-65-5P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and blood platelet aggregation inhibition by)

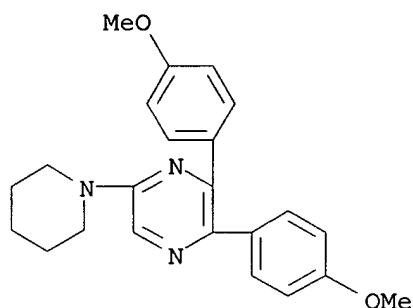
RN 141425-23-2 CAPLUS

CN Pyrazine, 2,3-bis(4-methoxyphenyl)-5-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)



RN 147593-65-5 CAPLUS

CN Pyrazine, 2,3-bis(4-methoxyphenyl)-5-(1-piperidinyl)- (9CI) (CA INDEX NAME)



L5 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1992:235661 CAPLUS

DOCUMENT NUMBER: 116:235661

TITLE: Preparation of diphenylazines as antithrombotics
vasodilators, antihypertensives, and
antiinflammatoriesINVENTOR(S): Takasugi, Hisashi; Sakai, Hiroyoshi; Tanaka, Akito;
Ishikawa, Takatoshi

PATENT ASSIGNEE(S): Fujisawa Pharmaceutical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 121 pp.

CODEN: PIXXD2

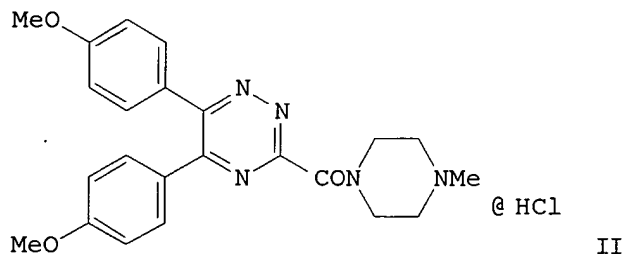
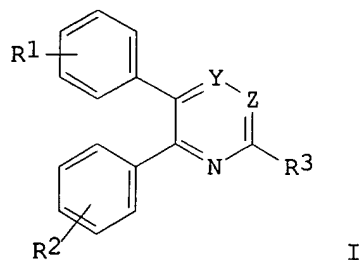
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9202513	A1	19920220	WO 1991-JP1042	19910805
W: JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
JP 06501926	T2	19940303	JP 1991-513247	19910805
PRIORITY APPLN. INFO.:			GB 1990-17183	19900806
			GB 1990-20345	19900918
			WO 1991-JP1042	19910805
OTHER SOURCE(S):		MARPAT 116:235661		
GI				



AB Title compds. [I; R1,R2 = alkoxy; R3 = (substituted) (tetrahydro)pyridyl, piperidyl, piperazinyl, morpholinyl, substituted amino, carboxyalkyl, carboxyalkenyl, hydroxyalkyl, CHO, EtO2C, alkylaminocarbonyl, etc.; Y,Z = CH, N], were prepd. Thus,

3-ethoxycarbonyl-5,6-bis(4-methoxyphenyl)-1,2,4-

trriazine and N-methylpiperazine were heated at 80-90.degree. for 4 h 40 min to give, after treatment with HCl in EtOH, title compd. II. In an ex vivo screen, II at 1.0 mg/kg orally gave 100% inhibition of arachidonic acid induced platelet aggregation in guinea pig platelet rich plasma.

IT **141425-21-0P 141425-22-1P 141425-23-2P**

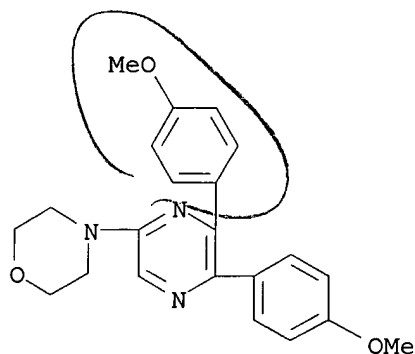
141425-24-3P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

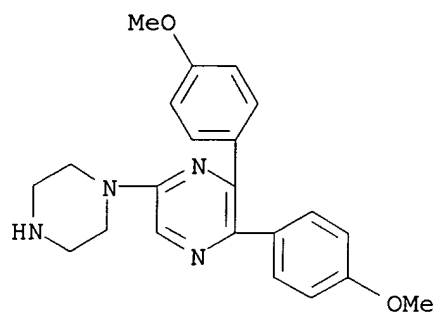
(prepn. of, as cardiovascular agent)

RN 141425-21-0 CAPLUS

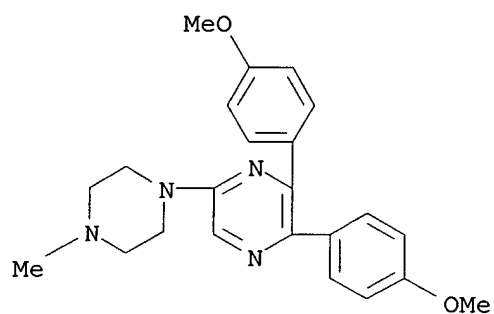
CN Morpholine, 4-[5,6-bis(4-methoxyphenyl)pyrazinyl]- (9CI) (CA INDEX NAME)



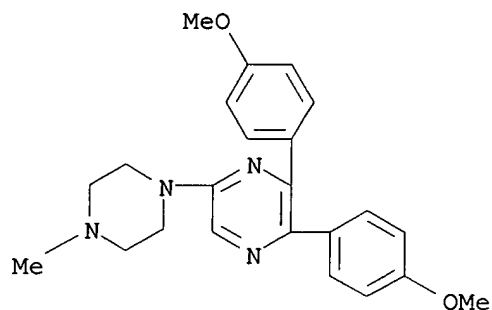
RN 141425-22-1 CAPLUS
 CN Pyrazine, 2,3-bis(4-methoxyphenyl)-5-(1-piperazinyl)- (9CI) (CA INDEX NAME)



RN 141425-23-2 CAPLUS
 CN Pyrazine, 2,3-bis(4-methoxyphenyl)-5-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)



RN 141425-24-3 CAPLUS
 CN Pyrazine, 2,3-bis(4-methoxyphenyl)-5-(4-methyl-1-piperazinyl)-, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

LS ANSWER 5 OF 9 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1990:77113 CAPLUS

DOCUMENT NUMBER: 112:77113

TITLE: Cross-coupling reactions of chloropyrazines with 1-substituted indoles

AUTHOR(S): Akita, Yasuo; Itagaki, Yohko; Takizawa, Sayuri; Ohta, Akihiro

CORPORATE SOURCE: Tokyo Coll. Pharm., Tokyo, 192-03, Japan

SOURCE: Chem. Pharm. Bull. (1989), 37(6), 1477-80

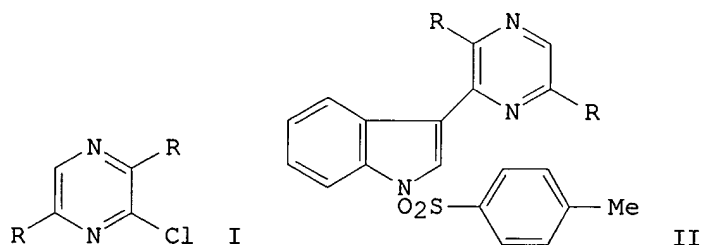
CODEN: CPBTAL; ISSN: 0009-2363

DOCUMENT TYPE: Journal

LANGUAGE: English

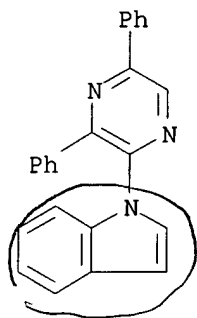
OTHER SOURCE(S): CASREACT 112:77113

GI



AB Palladium-catalyzed coupling reactions of 2-chloro-3,6-dialkylpyrazines I (R = Me, Et, Me₂CH, Me₂CHCH₂) with 1-tosylindole gave 1-tosyl-3-(3,6-dialkylpyrazin-2-yl)indoles II as the main product in each case. The subsequent hydrolysis of the products yielded the corresponding 3-(3,6-dialkylpyrazin-2-yl)indoles under alk. conditions. Coupling reactions of 2-chloro-3,6-dialkylpyrazines with 1-methyl- or 1-benzylindole occurred at the 2-position of the indoles, but

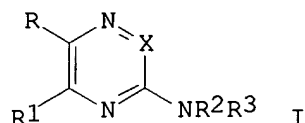
2-chloro-3,5-diphenylpyrazine failed to react with 1-methylindole.
 IT **125031-89-2P**
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)
 RN 125031-89-2 CAPLUS
 CN 1H-Indole, 1-(3,5-diphenylpyrazinyl)- (9CI) (CA INDEX NAME)



ANSWER 6 OF 9 CAPLUS COPYRIGHT 2001 ACS
 ACCESSION NUMBER: 1984:103396 CAPLUS
 DOCUMENT NUMBER: 100:103396
 TITLE: 1,2,4-Triazine and pyrazine derivatives
 INVENTOR(S): Wong, David Taiwai; Lacefield, William Bryant
 PATENT ASSIGNEE(S): Lilly, Eli, and Co. , USA
 SOURCE: Eur. Pat. Appl., 48 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 88593	A2	19830914	EP 1983-301142	19830303
EP 88593	A3	19840523		
EP 88593	B1	19870527		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
US 4513135	A	19850423	US 1982-354982	19820305
DK 8300972	A	19830906	DK 1983-972	19830228
RO 86320	B3	19850315	RO 1983-110181	19830228
IL 68002	A1	19860930	IL 1983-68002	19830228
ZA 8301387	A	19841031	ZA 1983-1387	19830301
FI 8300708	A	19830906	FI 1983-708	19830302
JP 58162582	A2	19830927	JP 1983-35221	19830302
AU 8312029	A1	19830908	AU 1983-12029	19830303
AU 547581	B2	19851024		
GB 2116179	A1	19830921	GB 1983-5846	19830303
GB 2116179	B2	19850911		
CA 1195327	A1	19851015	CA 1983-422805	19830303
AT 27457	E	19870615	AT 1983-301142	19830303

DD 207716	A5	19840314	DD 1983-248497	19830304
ES 520340	A1	19840416	ES 1983-520340	19830304
HU 31175	O	19840428	HU 1983-762	19830304
HU 191368	B	19870227		
ES 526297	A1	19850416	ES 1983-526297	19831006
US 4585861	A	19860429	US 1985-688946	19850104
PRIORITY APPLN. INFO.:			US 1982-354982	19820305
			EP 1983-301142	19830303
GI				

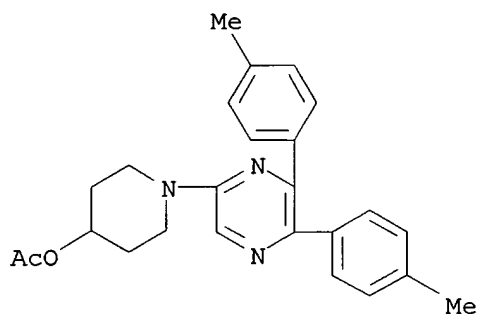


AB The title compds. I (X = CH, N; R, R1 = substituted Ph; NR2R3 = heterocyclic amino) were prepd. Thus 3-methylthio-5,6-bis(4-methylphenyl)triazine was prepd. by methylating the mercaptan and was treated with 4-piperidinol to give I (R = R1 = 4-MeC6H4, NR2R3 = 4-hydroxypiperidino, X = N) which at 900 nM gave a 50% increase in GABA binding in vitro.

IT **88300-51-0P**
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. and GABA binding activity of)

RN 88300-51-0 CAPLUS

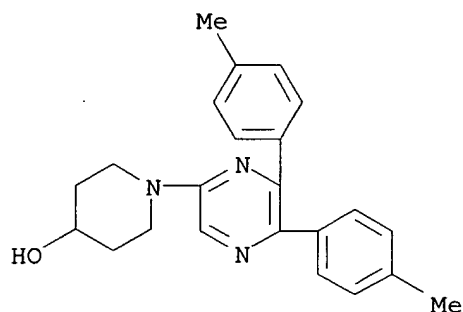
CN 4-Piperidinol, 1-[5,6-bis(4-methylphenyl)pyrazinyl]-, acetate (ester)
 (9CI) (CA INDEX NAME)



IT **88300-50-9P**
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
 (prepn., acylation, and GABA binding activity of)

RN 88300-50-9 CAPLUS

CN 4-Piperidinol, 1-[5,6-bis(4-methylphenyl)pyrazinyl]- (9CI) (CA INDEX NAME)



ANSWER 7 OF 9 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1978:400327 CAPLUS

DOCUMENT NUMBER: 89:327

TITLE: Piperazinyipyrazines with central serotoninmimetic activity

AUTHOR(S): Lumma, William C., Jr.; Hartman, Richard D.; Saari, Walfred S.; Engelhardt, Edward L.; Hirschmann, Ralph; Clineschmidt, Bradley V.; Torchiana, Mary Lou; Stone, Clement A.

CORPORATE SOURCE: Merck Sharp and Dohme Res. Lab., West Point, Pa., USA

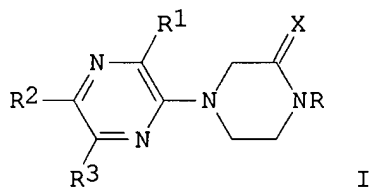
SOURCE: J. Med. Chem. (1978), 21(6), 536-42

CODEN: JMCMAR; ISSN: 0022-2623

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



I

AB Twenty title compds. I [R = H, (CH₂)₃NMe₂, or 6-chloro-2-pyrazinyl; R = H or Cl; R₂ = H, Cl, Ph, or CO₂Me; R₃ = H, Cl, Me, SPh, etc.; X = 2H or O] were synthesized by reaction of the appropriate chloropyrazine with piperazine [110-85-0] or an N-substituted piperazine. I; (R = R₁ = R₂ = H; R₃ = Cl; X = 2H, .HCl) [61655-58-1] had pharmacol. properties in mice characteristic of potent central serotoninmimetic activity and only weak peripheral serotoninmimetic action in isolated rat uterus. Preferred conformations of this compd., detd. by classical strain energy calcs.

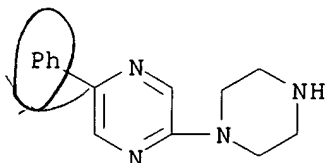
and

CNDO mol. orbital techniques, were compared with serotonin [50-67-9] in order to detn. those structural features which might interact with serotonin receptors.

IT 61655-63-8P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and serotoninmimetic activity of)

RN 61655-63-8 CAPLUS

CN Pyrazine, 2-phenyl-5-(1-piperazinyl)-, monohydrochloride (9CI) (CA INDEX
NAME)

● HCl

L5 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1977:72702 CAPLUS

DOCUMENT NUMBER: 86:72702

TITLE: Anorectic substituted (1'-piperazinyl)pyrazine
derivatives

INVENTOR(S): Saari, Walfred S.; Lumma, William C., Jr.

PATENT ASSIGNEE(S): Merck and Co., Inc., USA

SOURCE: Ger. Offen., 37 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

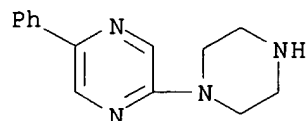
LANGUAGE: German

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2617205	A1	19761028	DE 1976-2617205	19760420
DE 2617205	B2	19800508		
DE 2617205	C3	19810129		
SE 7604093	A	19761022	SE 1976-4093	19760407
SE 421695	B	19820125		
SE 421695	C	19820506		
DK 7601644	A	19761022	DK 1976-1644	19760407
DK 143899	B	19811026		
DK 143899	C	19820413		
NO 7601207	A	19761022	NO 1976-1207	19760408
NO 146599	B	19820726		
NO 146599	C	19821103		
FI 7600978	A	19761022	FI 1976-978	19760409
FI 62666	B	19821029		
FI 62666	C	19830210		
NL 7603800	A	19761025	NL 1976-3800	19760409
NL 167692	B	19810817		
NL 167692	C	19820118		

Hong Liu



● HCl

L5 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1971:75924 CAPLUS

DOCUMENT NUMBER: 74:75924

TITLE: Heteroaromaticity. XLIX. Tetrazolo-azido isomerization in heteroaromatics. I. Syntheses and reactivities of some tetrazolopolyazines

AUTHOR(S): Sasaki, Tadashi; Kanematsu, Ken; Murata, Masayoshi

CORPORATE SOURCE: Fac. Eng., Nagoya Univ., Nagoya, Japan

SOURCE: J. Org. Chem. (1971), 36(3), 446-9

CODEN: JOCEAH

DOCUMENT TYPE: Journal

LANGUAGE: English

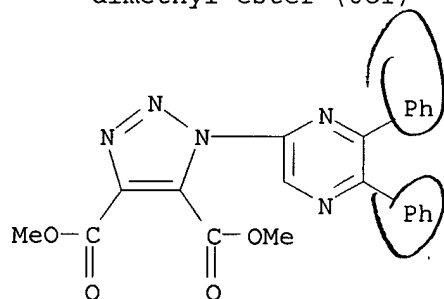
AB The tetrazolo-azido transformation for eight model compds. are discussed. The tetrazolo-azido equil. in tetrazolo[1,5-a]pyrazines (I) is much influenced by the solvent, but the tetrazolo[1,5-b]pyridazine derivs. exist entirely as the tetrazoles in various solvents. 6-Azidotetrazolo[1,5-b]pyridazine and 6-azido-s-triazolo[4,3-b]-pyridazine exist exclusively as the azido form in the solid state because of the destabilization of the fused rings by electron attracting tetrazolo and triazolo moieties. Photochem. and thermal reactions of I give the imidazoles.

IT 27062-56-2P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 27062-56-2 CAPLUS

CN 1H-1,2,3-Triazole-4,5-dicarboxylic acid, 1-(5,6-diphenylpyrazinyl)-, dimethyl ester (8CI) (CA INDEX NAME)



=> logoff

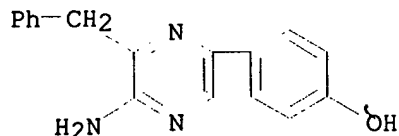
Hong Liu

RL: RCT (Reactant)

(light-emitters involved in the chemi- and bioluminescence of
coelenterazine)

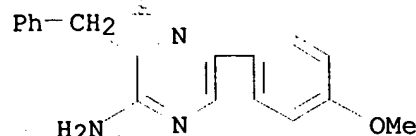
RN 37156-84-6 CAPLUS

CN Phenol, 4-[5-amino-6-(phenylmethyl)pyrazinyl]- (9CI) (CA INDEX NAME)



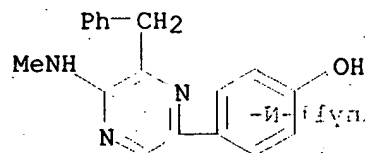
RN 40040-81-1 CAPLUS

CN Pyrazinamine, 5-(4-methoxyphenyl)-3-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 272117-54-1 CAPLUS

CN Phenol, 4-[5-(methylamino)-6-(phenylmethyl)pyrazinyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT:

REFERENCE(S):

21

- (1) Campbell, A; Mar Biol 1990, V104, P219 CAPLUS
- (2) Hart, R; Biochemistry 1979, V18, P2204 CAPLUS
- (4) Hirano, T; Tetrahedron Lett 1998, V39, P5541 CAPLUS
- (5) Hori, K; Chem Commun 1973, P492 CAPLUS
- (6) Ireland, J; Adv Phys Org Chem 1976, V12, P131 CAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

124 ANSWER 17 OF 145 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1999:495258 CAPLUS

DOCUMENT NUMBER: 131:129907

TITLE: Preparation and formulation of tricyclic compounds as immunosuppressants and allergy inhibitors

INVENTOR(S): Panimoto, Norihiko; Hasegawa, Yasushi; Haga, Nobuhiro

PATENT ASSIGNEE(S): Shionogi & Co., Ltd., Japan

SOURCE: PCT Int. Appl., 298 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

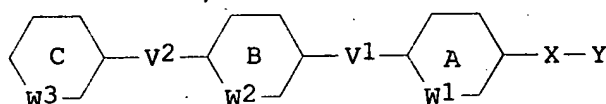
PATENT INFORMATION:

Searched by Barb O'Brien, STIC 308-4291

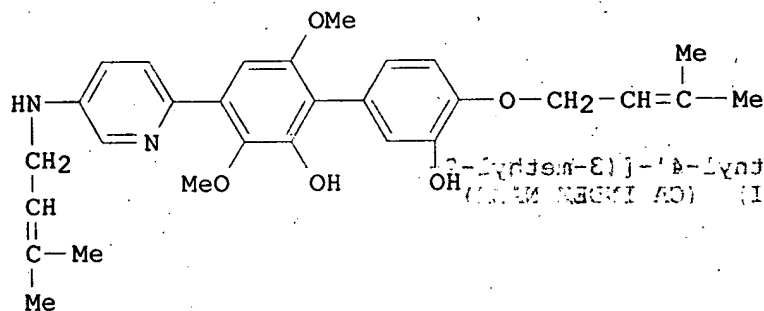
11-15-ES1465 10-02-ES1475 12-21-ES1485

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9938829	A1	19990805	WO 1999-JP297	19990126
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9919837	A1	19990816	AU 1999-19837	19990126
EP 1052238	A1	20001115	EP 1999-900676	19990126
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 9908539	A	20001205	BR 1999-8539	19990126
NO 2000003706	A	20000914	NO 2000-3706	20000719
PRIORITY APPLN. INFO.:				
			JP 1998-15554	A 19980128
			WO 1999-JP297	W 19990126

OTHER SOURCE(S): MARPAT 131:129907
GI



I.



II

AB The title compds. I [each of ring A, ring B and ring C is independently a substituted or unsubstituted arom. ring or a substituted or unsubstituted five or six-membered heterocycle which may be condensed with a benzene ring; when ring A, ring B and/or ring C is a substituted or unsubstituted five-membered heterocycle, W1, W2 and/or W3 represents a bond; X is O or NR1 (where R1 is hydrogen, a lower alkyl or the like); Y is hydrogen, a lower alkyl, a lower alkenyl or the like; one of V1 and V2 is a single bond and the other is a single bond, O, etc.] are prepd. The title compd. II in vitro showed IC50 of 400 ng/mL against the growth of mouse EL4 cells. The inhibiting activities of compds. of this invention against the prodn. of IgE were also demonstrated.

IT 234428-40-1P 234428-41-2P 234428-42-3P
234428-43-4P 234428-44-5P 234428-45-6P
234428-46-7P 234428-47-8P 234428-49-0P
234428-50-3P 234428-51-4P 234428-52-5P

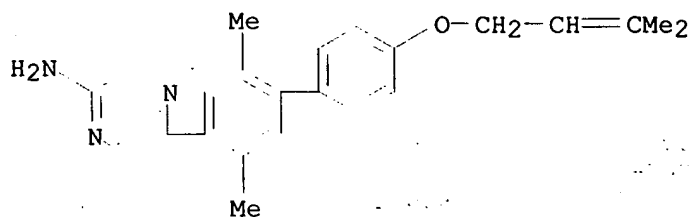
234428-53-6P 234429-20-0P 234429-21-1P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of tricyclic compds. as immunosuppressants and allergy inhibitors).

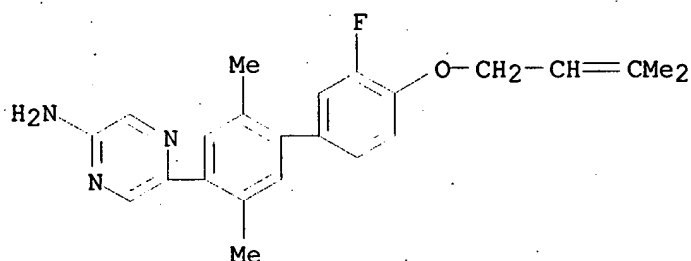
RN 234428-40-1 CAPLUS

CN Pyrazinamine, 5-[2,5-dimethyl-4'-[(3-methyl-2-butenyl)oxy][1,1'-biphenyl]-4-yl]- (9CI) (CA INDEX NAME)



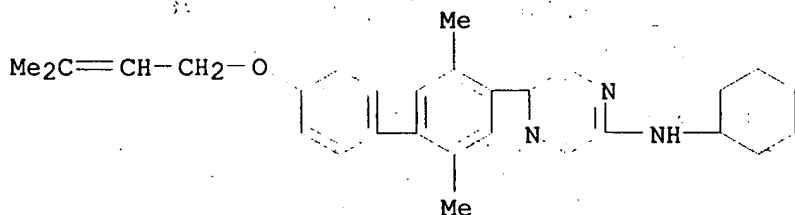
RN 234428-41-2 CAPLUS

CN Pyrazinamine, 5-[3'-fluoro-2,5-dimethyl-4'-[(3-methyl-2-butenyl)oxy][1,1'-biphenyl]-4-yl]- (9CI) (CA INDEX NAME)



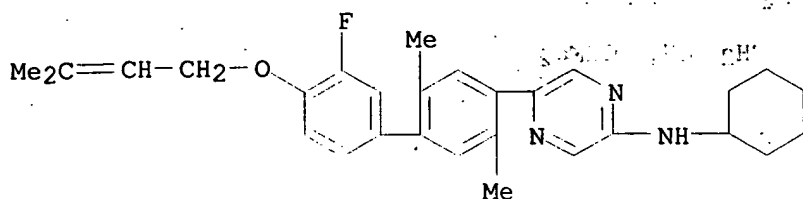
RN 234428-42-3 CAPLUS

CN Pyrazinamine, N-cyclohexyl-5-[2,5-dimethyl-4'-[(3-methyl-2-butenyl)oxy][1,1'-biphenyl]-4-yl]- (9CI) (CA INDEX NAME)

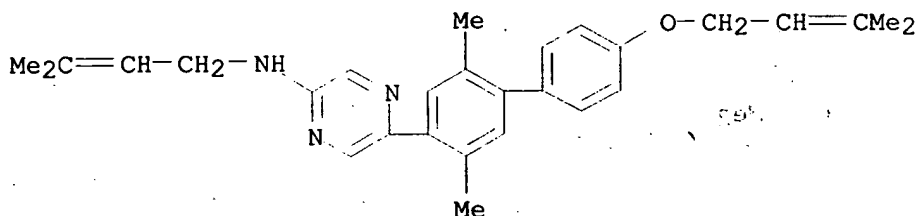


RN 234428-43-4 CAPLUS

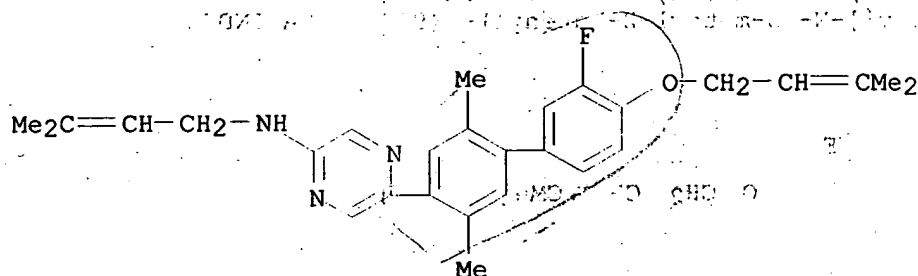
CN Pyrazinamine, N-cyclohexyl-5-[3'-fluoro-2,5-dimethyl-4'-[(3-methyl-2-butenyl)oxy][1,1'-biphenyl]-4-yl]- (9CI) (CA INDEX NAME)



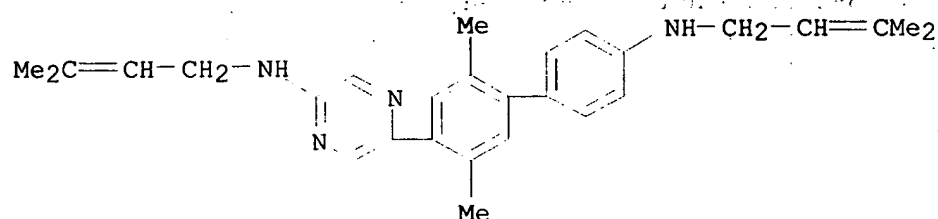
RN 234428-44-5 CAPLUS
 CN Pyrazinamine, 5-[2,5-dimethyl-4'-[(3-methyl-2-butenyl)oxy]-1,1'-biphenyl]-4-yl]-N-(3-methyl-2-butenyl)- (9CI) (CA INDEX NAME)



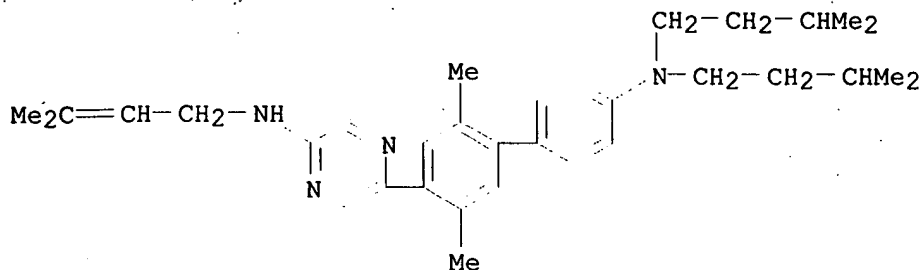
RN 234428-45-6 CAPLUS
 CN Pyrazinamine, 5-[3'-fluoro-2,5-dimethyl-4'-[(3-methyl-2-butenyl)oxy]-1,1'-biphenyl]-4-yl]-N-(3-methyl-2-butenyl)- (9CI) (CA INDEX NAME)



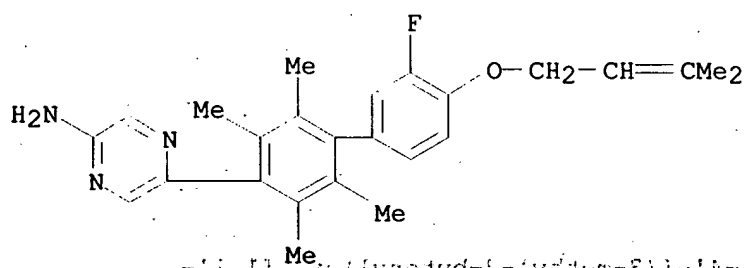
RN 234428-46-7 CAPLUS
 CN Pyrazinamine, 5-[2,5-dimethyl-4'-[(3-methyl-2-butenyl)amino]-1,1'-biphenyl]-4-yl]-N-(3-methyl-2-butenyl)- (9CI) (CA INDEX NAME)



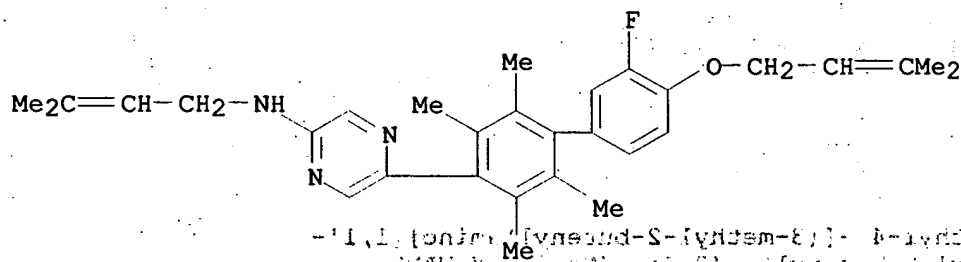
RN 234428-47-8 CAPLUS
 CN Pyrazinamine, 5-[4'-[bis(3-methylbutyl)amino]-2,5-dimethyl-1,1'-biphenyl]-4-yl]-N-(3-methyl-2-butenyl)- (9CI) (CA INDEX NAME)



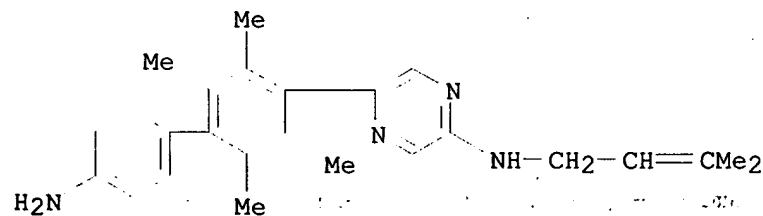
RN 234428-49-0 CAPLUS
CN Pyrazinamine, 5-[3'-fluoro-2,3,5,6-tetramethyl-4'-[(3-methyl-2-butenyl)oxy][1,1'-biphenyl]-4-yl]- (9CI) (CA INDEX NAME)



RN 234428-50-3 CAPLUS
CN Pyrazinamine, 5-[3'-fluoro-2,3,5,6-tetramethyl-4'-[(3-methyl-2-butenyl)oxy][1,1'-biphenyl]-4-yl]-N-(3-methyl-2-butenyl)- (9CI) (CA INDEX NAME)

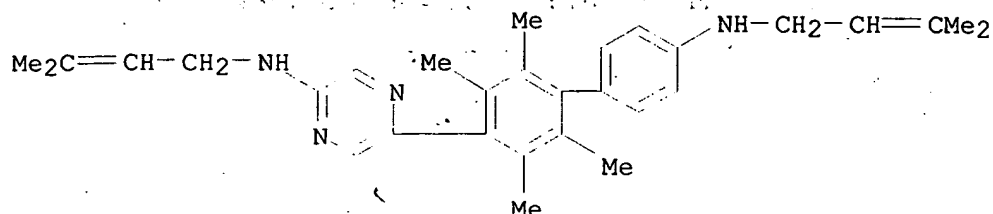


RN 234428-51-4 CAPLUS
CN Pyrazinamine, 5-(4'-amino-2,3,5,6-tetramethyl[1,1'-biphenyl]-4-yl)-N-(3-methyl-2-butenyl)- (9CI) (CA INDEX NAME)



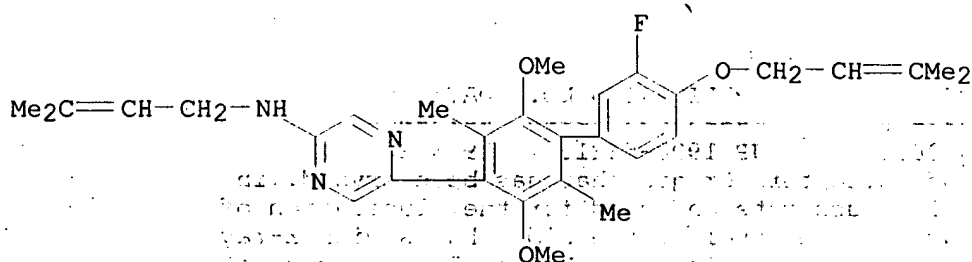
RN 234428-52-5 CAPLUS

CN Pyrazinamine, N-(3-methyl-2-butenyl)-5-[2,3,5,6-tetramethyl-4'-[(3-methyl-2-butenyl)amino][1,1'-biphenyl]-4-yl]- (9CI) (CA INDEX NAME)



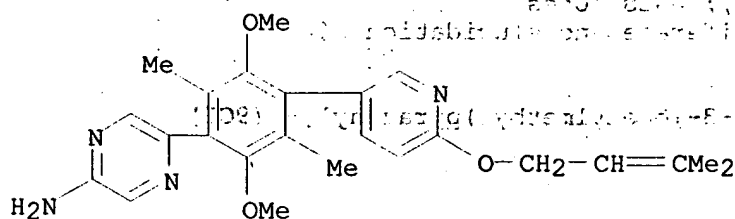
RN 234428-53-6 CAPLUS

CN Pyrazinamine, 5-[3'-fluoro-2,5-dimethoxy-3,6-dimethyl-4'-[(3-methyl-2-butenyl)oxy][1,1'-biphenyl]-4-yl]-N-(3-methyl-2-butenyl)- (9CI) (CA INDEX NAME)



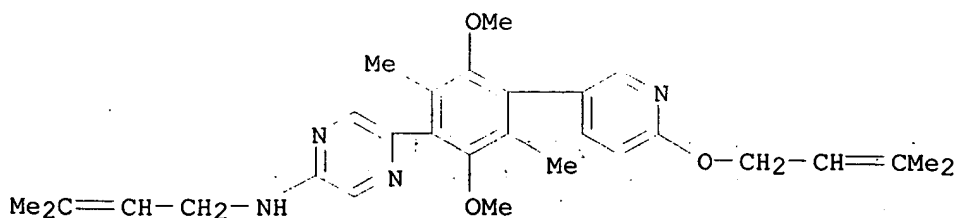
RN 234429-20-0 CAPLUS

CN Pyrazinamine, 5-[2,5-dimethoxy-3,6-dimethyl-4-[6-[(3-methyl-2-butenyl)oxy]-3-pyridinyl]phenyl]- (9CI) (CA INDEX NAME)



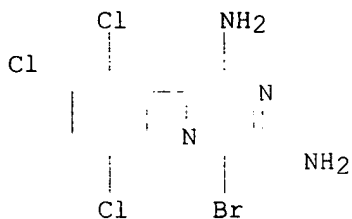
RN 234429-21-1 CAPLUS

CN Pyrazinamine, 5-[2,5-dimethoxy-3,6-dimethyl-4-[6-[(3-methyl-2-butenyl)oxy]-3-pyridinyl]phenyl]-N-(3-methyl-2-butenyl)- (9CI) (CA INDEX NAME)

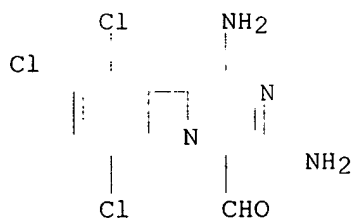


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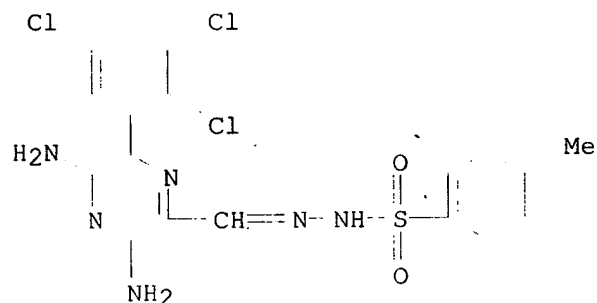
RN 212779-41-4 CAPLUS
 CN 2,6-Pyrazinediamine, 3-bromo-5-(2,3,5-trichlorophenyl)- (9CI) (CA INDEX NAME)



RN 212779-42-5 CAPLUS
 CN Pyrazinecarboxaldehyde, 3,5-diamino-6-(2,3,5-trichlorophenyl)- (9CI) (CA INDEX NAME)



RN 212779-43-6 CAPLUS
 CN Benzenesulfonic acid, 4-methyl-, [[3,5-diamino-6-(2,3,5-trichlorophenyl)pyrazinyl]methylene]hydrazide (9CI) (CA INDEX NAME)



124 ANSWER 24 OF 145 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1998:184331 CAPLUS

DOCUMENT NUMBER: 128:244282

TITLE: Preparation of fluorescent cyclodextrins and imidazopyrazines as their intermediates

INVENTOR(S): Teranishi, Katsumichi; Komoda, Junko; Hisamatsu, Makoto; Yamada, Tetsuya

PATENT ASSIGNEE(S): Japan Maize Products Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 17 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10077286	A2	19980324	JP 1996-235584	19960905

OTHER SOURCE(S): MARPAT 128:244282
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Fluorescent cyclodextrins I, II [R1 = H, C1-6 alkyl, C1-6 alkoxy; R2 = H, C1-6 (un)substituted alkyl; R3 = Q; m = 0-5; n = 6-8], and their salts, useful for optical devices and sensors (no data), are prepd. by condensation of imidazopyrazines I, II (R1, R2, m = same as above; R3 = OH), or their salts with 6-monodeoxyaminocyclodextrin. I.HCl (R1 = MeO, R2 = CH2Ph, R3 = OH) was treated with mono-6-deoxy-6-amino-.alpha.-cyclodextrin and 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide HCl salt at 0.degree. for 14 h in pyridine to give 26% I (R1 = MeO, R2 = CH2Ph, R3 = Q, n = 6).

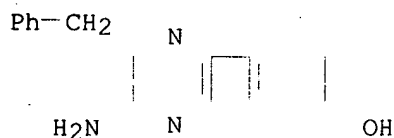
IT 37156-84-6 40040-81-1 119738-50-0

RL: RCT (Reactant)

(prepn. of fluorescent cyclodextrins and imidazopyrazines as their intermediates for optical devices and sensors)

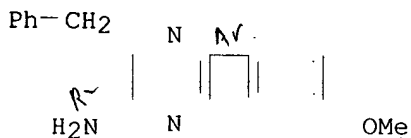
RN 37156-84-6 CAPLUS

CN Phenol, 4-[5-amino-6-(phenylmethyl)pyrazinyl]- (9CI) (CA INDEX NAME)



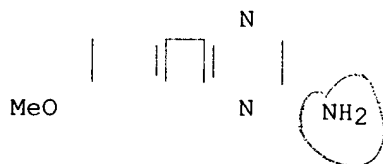
RN 40040-81-1 CAPLUS

CN Pyrazinamine, 5-(4-methoxyphenyl)-3-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 119738-50-0 CAPLUS

CN Pyrazinamine, 5-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



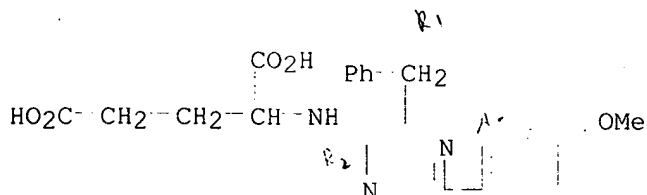
IT 204770-58-1P 204770-62-7P 204770-64-9P

204770-67-2P 204770-68-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of fluorescent cyclodextrins and imidazopyrazines as their
 intermediates for optical devices and sensors)

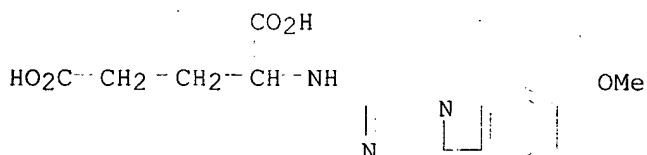
RN 204770-58-1 CAPLUS

CN Glutamic acid, N-[5-(4-methoxyphenyl)-3-(phenylmethyl)pyrazinyl]- (9CI)
 (CA INDEX NAME)



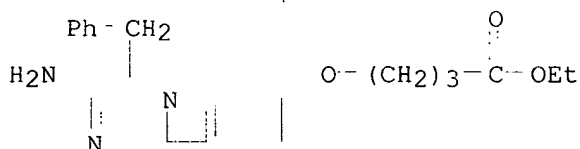
RN 204770-62-7 CAPLUS

CN Glutamic acid, N-[5-(4-methoxyphenyl)pyrazinyl]- (9CI) (CA INDEX NAME)



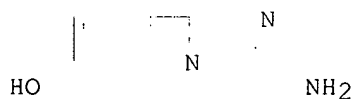
RN 204770-64-9 CAPLUS

CN Butanoic acid, 4-[4-[5-amino-6-(phenylmethyl)pyrazinyl]phenoxy]-, ethyl
 ester (9CI) (CA INDEX NAME)



RN 204770-67-2 CAPLUS

CN Phenol, 4-(5-aminopyrazinyl)- (9CI) (CA INDEX NAME)



RN 204770-68-3 CAPLUS

CN Butanoic acid, 4-[4-(5-aminopyrazinyl)phenoxy]-, ethyl ester (9CI) (CA
 INDEX NAME)

LANGUAGE: English

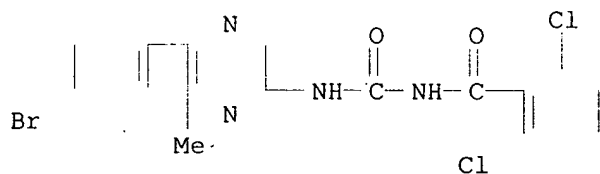
AB Several mono- and di-substituted urea pesticides were treated with (CF₃CO)₂O and heptafluorobutyric anhydride to det. if the procedure normally used to derivatize tri-substituted phenylureas yielded cleavage products instead of the derivatized phenylureas. Compds. studied included 4-chlorophenylurea, N-demethoxylinuron, siduron, EL-494, and diflubenzuron. All compds. yielded N-perfluoroacylated cleavage products, indicating a generalized cleavage reaction for mono- and di-substituted phenylureas.

IT 59489-59-7

RL: RCT (Reactant)
(cleavage of, with perfluoroacetic anhydride)

RN 59489-59-7 CAPLUS

CN Benzamide, N-[[[5-(4-bromophenyl)-6-methylpyrazinyl]amino]carbonyl]-2,6-dichloro- (9CI) (CA INDEX NAME)

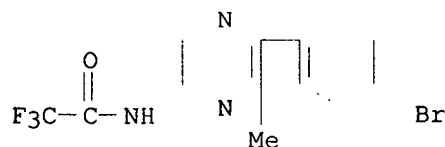


IT 85314-15-4P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 85314-15-4 CAPLUS

CN Acetamide, N-[5-(4-bromophenyl)-6-methylpyrazinyl]-2,2,2-trifluoro- (9CI)
(CA INDEX NAME)



L24 ANSWER 84 OF 145 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1984:5477 CAPLUS

DOCUMENT NUMBER: 100:5477

TITLE: Photoreaction of 5-aryl-2,3-dicyanopyrazine in the presence of diethylamine

AUTHOR(S): Hamazaki, Hirohide; Tada, Masaru

CORPORATE SOURCE: Dep. Chem., Waseda Univ., Tokyo, Japan

SOURCE: Rikogaku Kenkyusho Hokoku, Waseda Daigaku (1983), (103), 35-8

CODEN: WDRKA6; ISSN: 0372-7181

DOCUMENT TYPE: Journal

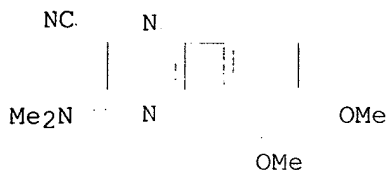
LANGUAGE: English

AB 5-Aryl-3-cyanopyrazine and 5-aryl-3-cyano-2-(diethylamino)pyrazine in which the aryl group is 3,4-dimethoxyphenyl or 4'-(benzo-15-crown-5)-yl, were formed by the photolysis of 5-aryl-2,3-dicyanopyrazine in the presence of Et₂NH. Addn. of small amt. of a protic solvent to the reaction system, is required to produce the diethylamino-derivs. the role of the protic solvent and the reaction mechanism were discussed.

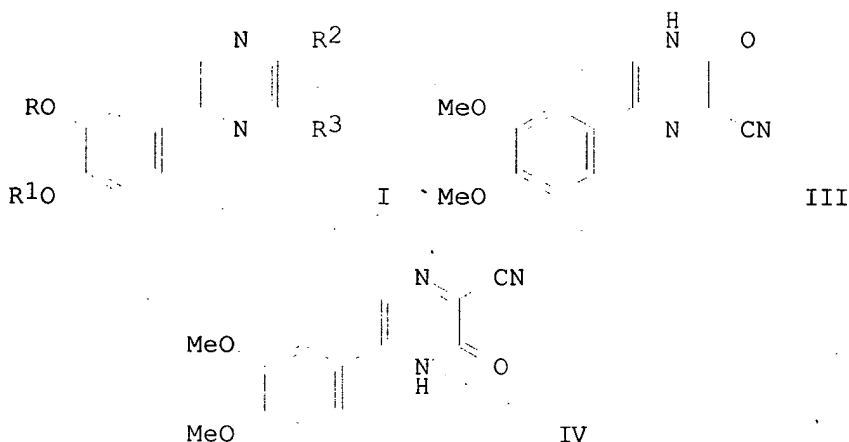
IT 88043-47-4P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of)
 RN 88043-47-4 CAPLUS
 CN Pyrazinecarbonitrile, 6-(3,4-dimethoxyphenyl)-3-(dimethylamino)- (9CI)
 (CA INDEX NAME)



L24 ANSWER 85 OF 145 CAPLUS COPYRIGHT 2001 ACS
 ACCESSION NUMBER: 1983:198155 CAPLUS
 DOCUMENT NUMBER: 98:198155
 TITLE: The substitution reaction of pyrazine-2,3-dicarbonitrile derivatives with ammonia, amines, water and alcohols
 AUTHOR(S): Hirano, Hideki; Lee, Rachel; Tada, Masaru
 CORPORATE SOURCE: Sch. Sci. Eng., Waseda Univ., Tokyo, 160, Japan
 SOURCE: J. Heterocycl. Chem. (1982), 19(6), 1409-13
 CODEN: JHTCAD; ISSN: 0022-152X
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI



AB Arylpyrazinedicarbonitriles I [R = R1 = Me, RR1 = O(CH2CH2OCH2CH2)2; R2 = R3 = cyano] (II) give alkylaminopyrazinecarbonitriles I (R2 = BuNH, PhCH2NH, R3 = CN; R3 = BuNH, PhCH2NH, R2 = CN) by the substitution reaction with amines but give only 3-aminopyrazine-2-carbonitrile deriv. on reaction with ammonia. The reaction of II with alcs. in the presence of a base gives I (R2 = MeO, PhCH2O, R3 = CN; R3 = MeO, PhCH2O, R2 = CN). The reaction of water gives pyrazinonecarbonitriles III and IV.
 IT 85575-14-OP 85575-18-4P 85575-28-6P
 RL: SPN (Synthetic preparation); PREP (Preparation)



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